

Weekly Assignment 6 – Instructions

Chapter 6 - Case Project 2 – Internet Speed Test Survey

Overall Requirements Document

REQUIREMENTS DOCUMENT	
Date:	July 31, 2019
Date Submitted:	
Application Title:	Internet Speed Test Survey
Purpose:	This Windows Classic Desktop application finds the average speed of a home Internet connection (see speedtest.net to measure your own connection's download speed).
Program Procedures:	To test the average speed of an Internet service provider with their local customers, a Windows application will compute the average Internet download speed. The application allows the user to enter up to 10 download speeds. The average speed is displayed in Mbps (Megabits per second).
Algorithms, Processing, and Conditions:	<ol style="list-style-type: none">1. The user clicks the Enter Internet Speed button to enter their Internet speed in Mbps.2. Each speed is displayed in a ListBox object with a scroll bar that appears when the number of values exceeds the given space.3. After 10 values have been entered, the average is displayed.4. If the user clicks the Cancel button before entering any time values, display an appropriate message.
Notes and Restrictions:	<ol style="list-style-type: none">1. The result should include two places after the decimal point.2. Nonnumeric values should not be accepted.3. Negative numbers should not be accepted.
Comments:	<ol style="list-style-type: none">1. The application allows decimal entries.2. Obtain a background image for this program from CengageBrain.com. The name of the image file is speed.

FIGURE 6-117

Use Case Definition

USE CASE DEFINITION

1. The Windows application opens, displaying Internet Speed Test Survey as the heading, a ListBox object with a scroll bar as needed that will display the Internet download speed of each home user tested at speedtest.net, and a Button object that allows the user to enter their download speed in Mbps.
2. In an InputBox object, the user enters up to 10 values representing the Internet speed of their home connection.
3. The program asks the user for the Internet speed again if the value is a negative or nonnumeric value.
4. The program displays the average time to two decimal places.
5. If the user clicks the Cancel button in the input box before entering 10 time values, the program uses the number of seconds entered for calculations. If the user enters no values, an appropriate message is displayed.

FIGURE 6-118

Screenshot of GUI

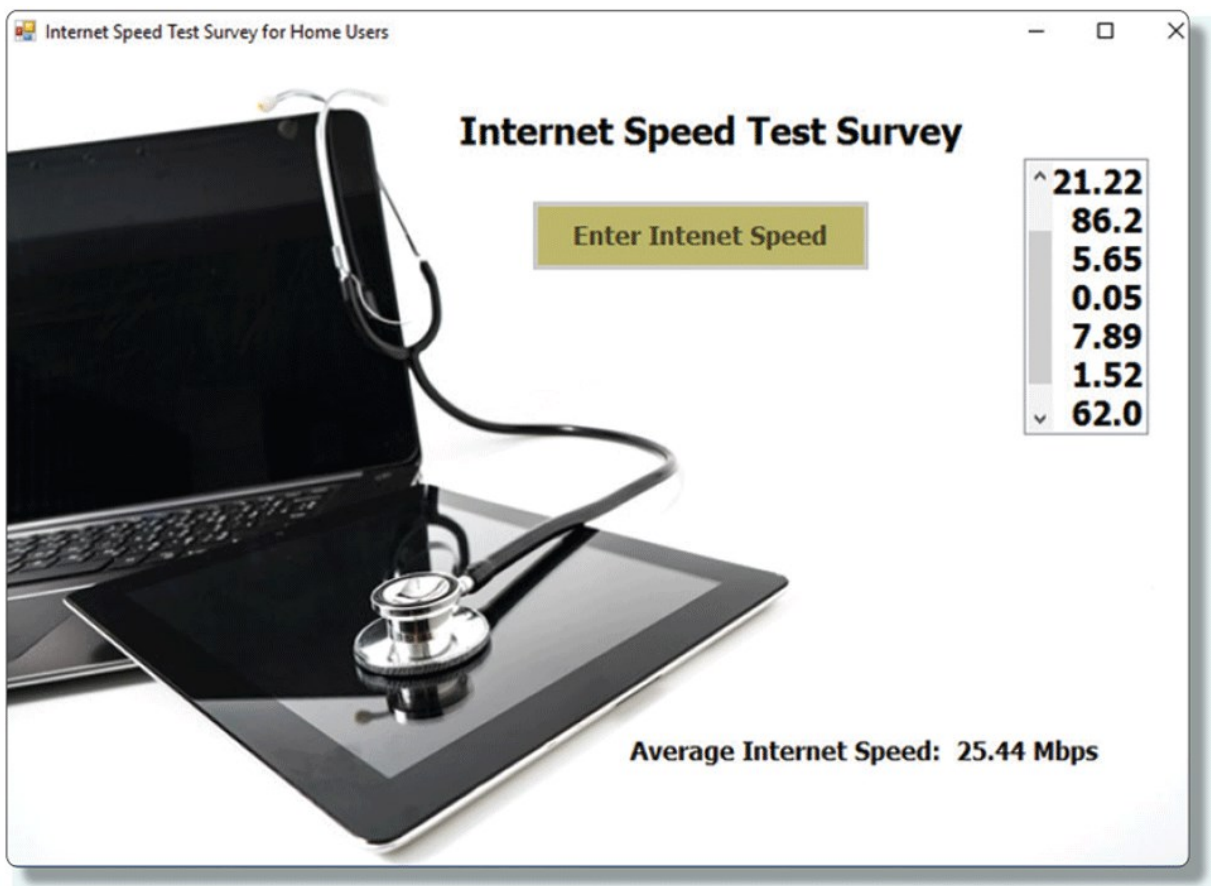


FIGURE 6-119